

WHAT IS CLAIMED IS:

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1. A process for folding sheets (2) comprising;  
conveying a sheet (2) in a feed direction (F) in a state in which the sheet lies horizontally in a feed plane (7)  
feeding the sheet (2) to at least two incipient-folding rollers (4, 4') by a rectilinear knife (6, 6'), which can be moved perpendicularly to the feed plane (7),  
wherein the sheet is received between said rollers in order to form a fold (8),  
conveying the folded sheet (2) away in the direction of the fold without completely closing the sheet.
  2. The process as claimed in claim 1, wherein, as the sheet is conveyed away, the sheet (2) is positioned on a saddle (16) aligned in the direction of the fold.
  3. The process as claimed in claim 1, wherein, once the sheet has been received by the incipient-folding rollers (4, 4'), the sheet (2) is conveyed further by said rollers perpendicularly to the feed plane (7) and then is received between at least two removal rollers (5, 5') and is conveyed away by the latter in the direction of the fold.
  4. The process as claimed in claim 3, wherein the removal rollers (5, 5') receive the sheet (2) in the region of the fold (8) and convey the sheet away while the lateral borders (2c, 2d) of the sheet (2) are at least partially located between the feed plane (7) and the incipient-folding rollers (4, 4').
  5. The process as claimed in claim 1, wherein the incipient-folding rollers (4, 4') are pressed against one another as the sheet (2) moves through them and are spaced apart from one another as the sheet (2) is conveyed away.
  6. The process as claimed in claim 3, wherein the removal rollers (5, 5') are pressed against one another as the sheet (2) is conveyed away and are spaced apart from one another as the sheet (2) is conveyed through the incipient-folding rollers (4, 4').
  7. The process as claimed in claim 1, wherein the feed direction (F) and the direction of the fold correspond to one another.
  8. The process as claimed in claim 1, further comprising a feed arrangement (3, 3') for feeding the sheet (2), and for conveying away the folded sheet in the feed direction (F).
  9. An apparatus for folding sheets (2) having a knife (6, 6') which has a rectilinear top edge (6a), located parallel to the feed plane (7), and can be moved perpendicularly to the feed plane (7), having at least two incipient-folding rollers (4, 4') which are arranged parallel to the feed plane (7) and of which the axes of rotation (9) run

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parallel to the edge (6a) in each case, and having at least two removal rollers (5, 5'), of which the axes of rotation (10) run perpendicularly to the feed plane (7) and which are arranged on a side of the incipient-folding rollers (4, 4').

10. The apparatus as claimed in claim 9, which comprises a saddle which is intended for receiving folded sheets (2) and is arranged downstream of the knife (6, 6').

11. The apparatus as claimed in claim 9, wherein the incipient-folding rollers (4, 4') can be moved in relation to one another so as to form between them a gap in which the sheet (2) can be displaced as it is conveyed away.

12. The apparatus as claimed in claim 9, which comprises a feed arrangement (3, 3') for feeding a horizontally lying sheet (2), in a feed direction (F), into the region between the knife (6, 6') and the incipient-folding rollers (4, 4').

13. The apparatus as claimed in claim 12, wherein the top edge (6a) of the knife (6, 6') is aligned in the feed direction (F).

14. The apparatus as claimed in claim 12, wherein the feed arrangement (3, 3') comprises at least two transporting belts (3a, 3b, 3a', 3b') which are arranged to the sides of the knife (6), parallel to the knife (6).

15. The apparatus as claimed in claim 9, which comprises a stop for feed sheets (2), said stop being arranged in the feed plane (7) downstream of the knife (6, 6') and perpendicularly to the feed direction (F).

16. The apparatus as claimed in claim 9, wherein the distance of the removal rollers (5, 5') from the feed plane (7) is less than half the sheet width.

17. The process as claimed in claim 1 wherein the folded sheet is conveyed away while end portions of the sheet remain parallel to the feed plane.

18. The apparatus of claim 9 wherein the removal rollers direct the sheet to the side of the incipient-folding rollers.

19. The apparatus of claim 9 wherein the removal rollers direct the sheet to the side of the incipient-folding rollers that is away from the feed plane.

20. The process of claim 1, wherein the sheet is folded with a grain direction transverse to the fold.

21. The apparatus of claim 9, wherein the sheet is folded with a grain direction transverse to the fold.

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